



# INDIANA STATE POLICE LABORATORY DIVISION

## PHYSICAL EVIDENCE BULLETIN

### LAMPS

**INTRODUCTION:** Often during a vehicle accident investigation it is important to determine if lights were “ON” or “OFF” at the time of impact. The procedures below pertain to handling vehicle lamps for laboratory examination. Incandescent filament lamps from automobiles, trailers, and light bars can be submitted for analysis.

**SCENE INVESTIGATION:** Determine whether the light switch is “ON” or “OFF”. DO NOT, under any circumstances, turn the switch “ON” if in the “OFF” position. Also check the possibility of blown fuses, broken wiring, and dead batteries. If possible hand carry the evidence to the laboratory. Send the material for examination, observing the following:

### **COLLECTION, PRESERVATION AND TRANSPORTATION OF LAMPS**

1. Intact lamps may be submitted as is, well packed with soft cotton or paper, cushioned in a rigid box.
2. Broken lamps:
  - a. All available auto lamp glass fragments from the scene must be collected for laboratory examination. A physical match of the broken glass to glass remaining in the headlamp of a hit and run vehicle can sometimes be achieved. This positively links the vehicle to the scene.
  - b. Carefully dismantle the lamp assemblies, insuring that all filaments, filament posts, and glass are included in the submission. The lamp mounting brackets and its hardware can be removed if the lamp is not damaged further.
  - c. Determine if the filaments are attached to the filament posts.

- d. Attempt to locate the filament if unattached, since most of the important information is detectable only with the filament.
  - e. Carefully package separated posts and filaments. Use disposable foam coffee cups or small cardboard boxes to prevent further damage. Use cotton gauze or tissue padding if needed.
  - f. SEPARATELY package the very fragile items from the scene and from the vehicle. Each item for laboratory examination must be identified by vehicle and position of origin on the vehicle.
  - g. All lamps within three feet of the damaged areas should be collected and submitted to the laboratory for analysis. In some circumstances, with no filament present, a conclusion of *on* or *off* can still be determined.
- 3. Properly mark the sealed package and identify the contents using an appropriate Indiana State Police Request for Laboratory Examination form so as to permit paperwork processing prior to the examination of the evidence.
  - 4. If the lamp is a light emitting diode (LED) lamp, the examination for on or off determination is generally not possible.

**Include a copy of the accident report and accident photographs depicting the position of each submitted lamp and overall damage of each vehicle.**

### **RESULTS POSSIBLE FROM LABORATORY EXAMINATION OF LAMPS**

If sufficient characteristics exist the laboratory examination can determine that a lamp or a particular filament was on or off at the time of an impact.

If some characteristics exist the laboratory examination can indicate that a lamp or a particular filament was on or off at the time of an impact.

If no characteristics exist to suggest that a lamp or particular filament is on or off at the time of impact testing can be conducted to determine if the lamp could function in its present condition.

For further information you may wish to consult with your local District Indiana State Police Crime Scene Investigator or the Indiana State Police Laboratory in Indianapolis. The laboratory number is toll free 1-866-855-2840 or 317-921-5300.